

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

Claim 1 (Currently Amended): A relay apparatus which is connected to a host computer through a network and transmits data received from said host computer to a device, comprising:

a first basic unit into which a peculiar network address is set and which performs a relay control between said host computer and said device;

a second basic unit into which only the same network address as that of said first basic unit is set and which performs a relay control between said host computer and said device; and

a common unit which makes one of said first basic unit and said second basic unit operative as a present system, monitors its status, and when an abnormality is detected during said monitoring operation, stops the basic unit of the present system and switches it to an operation of the basic unit of a standby system.

Claim 2 (Previously Presented): The apparatus according to claim 1, wherein each of said first and second basic units comprises:

a host communication control unit which is connected to said host computer and communicates therewith;

a device communication control unit which is connected to said device and communicates therewith;

a main control unit which performs a relay control for relaying the data received from said host computer to said device;

a setting unit which inputs set information necessary for the relay;

a secondary storing unit which stores resources including said set information, a control program, and character patterns from the host computer; and

a status monitoring unit which periodically notifies said common unit of a self status obtained as a self diagnosis result,

and said common unit comprises:

a common unit interface which is connected to said first basic unit and said second basic unit and communicates therewith;

a common unit address unit using a non-volatile memory which stores a common network address which is used for said first and second basic units; and

an abnormality detecting unit which, when the abnormality is detected from a status notice of the basic unit of the present system, instructs a power-off of the basic unit of the present system, thereafter, instructs a power-on of the basic unit of the standby system, and further, transmits the common network address stored in said common unit address unit to said host communication control unit of the basic unit of the standby system, thereby allowing said common network address to be taken over.

Claim 3 (Previously Presented): The apparatus according to claim 1, wherein said abnormality detecting unit of said common unit has a timer which sets a predetermined set time and is reactivated each time a periodic status notice from said basic unit is received and detects abnormality of the basic unit of the present system from time-out of said timer.

Claim 4 (Previously Presented): The apparatus according to claim 2, wherein if said common network address cannot be received from said common unit upon activation by a power-on, said host communication control unit of each of said first and second basic units reads out a common network address stored in a self address ROM and sets it.

Claim 5 (Previously Presented): The apparatus according to claim 2, wherein:
said common unit has a processing system selecting switch which selects the basic unit of the present system;

said common unit interface instructs a power-off to the basic unit of the present system and, thereafter, instructs a power-on to the basic unit selected by said processing system selecting switch in response to a notice of a power-on operation from said first basic unit or said second basic unit; and

each of said first and second basic units has a power control unit which notifies said common unit of the power-on operation at the time of a turn-on operation of a power switch, turns on a self power source when a power-on instruction is received from said common unit,

and turns off the self power source when a power-off instruction is received from said common unit.

Claim 6 (Cancelled)

Claim 7 (Previously Presented): The apparatus according to claim 2, wherein a plurality of devices is connected to said device communication control unit of each of said first and second basic units by a common local area network.

Claim 8 (Previously Presented): The apparatus according to claim 2, wherein a plurality of devices is individually connected to said device communication control unit of each of said first and second basic units by coaxial lines through a switching mechanism.

Claim 9 (Previously Presented): The apparatus according to claim 2, wherein a coaxial communication control unit which connects a plurality of devices by coaxial lines is connected to said device communication control unit of each of said first and second basic units through a common local area network.

Claim 10 (Withdrawn): A relay apparatus which is connected to a host computer of a present system or a host computer of a standby system through a network and transmits data received from said host computer to a device, comprising:

a basic unit into which a peculiar network address is set and which performs a relay control between said host computer of the present system or said host computer of the standby system and the device; and

a common unit which instructs said basic unit to select the host computer of the present system or said host computer of the standby system and activates the selected host computer.

Claim 11 (Withdrawn): The apparatus according to claim 10, wherein

said basic unit comprises:

a power control unit which notifies said common unit of a power-on operation at the time of a turn-on operation of a power switch and, thereafter, turns on a power source;

a secondary storing unit which stores resources including each set information of said host computer of the present system and said host computer of the standby system;

a host communication control unit which is initialized by the set information of the host computer which was selected and instructed from said common unit, is connected to said host computer, and communicates therewith;

a device communication control unit which is connected to said device and communicates therewith; and

a main control unit which performs a relay control for relaying data received from said host computer to said device,

and said common unit comprises:

a host selecting switch which instructs a selection of the host computer of the present system or the host computer of the standby system; and

a common unit interface which is connected to said basic unit and communicates therewith and responds a selecting instruction of the host computer by said host selecting switch in response to a notice of a power-on operation from said basic unit.

Claim 12 (Previously Presented): The apparatus according to claim 7, wherein said devices are at least one of a display and a printer.

Claim 13 (Previously Presented): The apparatus according to claim 8, wherein said devices are at least one of a display and a printer.

Claim 14. (Previously Presented): The apparatus according to claim 9, wherein said devices are at least one of a display and a printer.

Claim 15. (Currently Amended): A rely apparatus comprising:

a first basic unit that performs a relay control between a host computer of a present system and a device, the first basic unit having a common network address;

a second basic unit that performs a relay control between a host computer of a standby system and the device, the second basic unit having only the common network address; and

a common unit that monitors a status of the first basic unit, and switches the first basic unit to the second basic unit when an abnormality is detected in the first basic unit, the common unit that manages the common network address.

Claim 16. (Previously Presented): The relay apparatus according to claim 15, wherein when the host computer of the present system and the host computer of the standby system are arranged through the network, each of the first and second basic units stores each set information of the host computer of the present system and the host computer of the standby system, the common unit has a host selecting switch which instructs a selection of the host computer of the present system or the host computer of the standby system and responds a selecting instruction of the host selecting switch in response to the notice of the power-on operation from the first basic unit or the second basic unit, and

the first basic unit or the second basic unit which received the power-on instruction from the common unit is initialized by the set information of the selected and instructed host computer and starts the relay operation.

Claim 17. (Currently Amended): A system comprising:

a present system comprising:

a first basic unit that performs a relay control between a first host computer and a device,
the first basic unit having a common network address;

the first host computer, and

a standby system comprising:

a second basic unit that performs a relay control between a second host computer and the device, the second basic unit having only the common network address;

the second host computer, and

a common unit that monitors a status of the first basic unit, and switches the first basic unit to the second basic unit when an abnormality is detected in the first basic unit, the common unit that manages the common network address.

Claim 18. (Previously Presented): The system according to claim 17, wherein the common unit provides the common network address to the first basic unit and the second basic unit.

Claim 19. (Previously Presented): The system according to claim 17, the second basic unit further comprising:

a memory that stores common address information, and wherein when the second basic unit does not receive the common network address from the common unit, the second basic unit reads out the common network address from the memory.